CLAIMS:

1. Voltage controlled oscillator comprising a LC tank circuit (L, C, R) coupled to modulator means and characterized in that the modulator means are coupled to amplifier means via an adder for generating a quadrature periodical output signal having a frequency in a relative wide range, the frequency being controlled by a control signal (V_T) provided to the modulator means.

2. An oscillator as claimed in claim 1, wherein the modulator means comprises a series coupling of a buffer and a modulator.

3. An oscillator as claimed in claim 1, wherein the amplifier means comprise a series coupling of an another buffer and an amplifier.

4. An oscillator as claimed in claim 3, wherein the amplifier is a transconductance amplifier.

5. An oscillator as claimed in claim 1, wherein the amplifier means is a transconductance amplifier, the modulator means is a Gilbert cell modulator and the adder is a node.

6. A phase locked loop comprising an oscillator as claimed in any of the preceding claims for use in a large tuning TV tuner.